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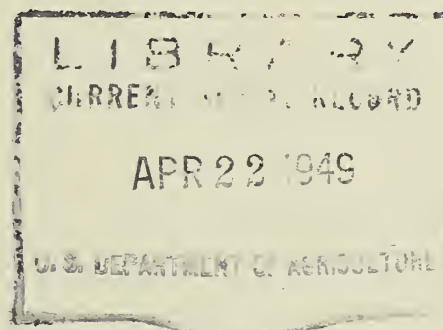
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FEDERAL-STATE COOPERATIVE SNOW SURVEYS and IRRIGATION WATER FORECASTS

for
NEVADA

April 1, 1949



by
Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
Nevada Agricultural Experiment Station
and
Nevada State Engineer

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State, and local organizations listed on the last page of this report.

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

NEVADA

Report Prepared

by

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Division of Irrigation
Soil Conservation Service
Nevada Agricultural Experiment Station
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INDEX TO SNOW COURSES

<u>NUMBERS</u>	<u>NAME</u>	<u>ELEVATION</u>	<u>NUMBERS</u>	<u>NAME</u>	<u>ELEVATION</u>	<u>NUMBERS</u>	<u>NAME</u>	<u>ELEVATION</u>
SNAKE RIVER			TRUCKEE BASIN			CARSON BASIN		
1.	Bear Creek	7,800	1.(Cal.)	Granite Peak	8,200	1.(Cal.)	Carson Pass	8,600
2.	Fox Creek	6,800	2.(Cal.)	Independence Lake. . . .	8,450	2.(Cal.)	Poison Flat.	7,900
4.	76 Creek	7,100	3.(Cal.)	Webber Peak	8,000	3.(Cal.)	Blue Lakes	8,000
5.	Gold Creek	6,600	4.(Cal.)	Donner Summit.	6,900	NORTHERN GREAT BASIN		
6.	Big Bend	6,700	5.(Cal.)	Ward Creek	7,000	1.	Bald Mountain	6,720
OWYHEE RIVER			6.(Cal.)	Webber Lake.	7,000	2.	Disaster Peak	6,500
1.	Lower Buckskin	6,700	7.(Cal.)	Sage Hen Creek	6,500	WALKER BASIN		
2.	Upper Buckskin	7,200	8.(Cal.)	Tahoe City	6,250	1.(Cal.)	Center Mountain. . . .	9,400
3.	Martin Creek	6,700	9.(Cal.)	Truckee #2	6,400	2.(Cal.)	Sonora Pass.	8,800
4.	Granite Peak	7,800	10.(Cal.)	Independence Creek . . .	6,300	3.(Cal.)	Buckeye Forks.	8,500
5.	Gold Creek	6,600	11.(Cal.)	Boca #2	5,900	4.(Cal.)	Virginia Lakes	9,500
6.	Big Bend	6,700	12.(Cal.)	Furnace Flat	6,600	5.(Cal.)	Willow Flat.	8,250
7.	Fry Canyon	6,700	13.(Cal.)	Fordyce Lake	6,500	6.(Cal.)	Buckeye Roughs	7,900
8.	Rodeo Flat	6,800	14.(Cal.)	Soda Springs	6,750	7.(Cal.)	Leavitt Meadows. . . .	7,200
9.	Lower Jack Creek	6,800	15.(Cal.)	Independence Camp. . . .	7,000	8.(Cal.)	Tioga Pass	9,900
10.	Upper Jack Creek	7,250	16.	Mt. Rose	9,000	TAHOE BASIN		
11.	Tremewan Ranch	5,700	17.(Cal.)	Truckee Ranger Station.	6,000	1.(Cal.)	Lake Lucille	8,400
12.	Taylor Canyon	6,200	18.(Cal.)	Donner Lake.	5,950	2.(Cal.)	Rubicon #1	8,100
UPPER HUMBOLDT RIVER			19.	Big Meadows.	8,800	3.(Cal.)	Hagens Meadow.	8,000
1.	Bear Creek	7,800	20.	Little Valley.	6,300	4.(Cal.)	Freel Bench.	7,300
2.	Fox Creek	6,800	LOWER COLORADO RIVER			5.(Cal.)	Ward Creek	7,000
4.	76 Creek	7,100	1.	Rainbow Canyon	7,800	7.(Cal.)	Upper Truckee.	6,400
5.	Gold Creek	6,600	2.	Kyle Canyon	8,200	8.(Cal.)	Tahoe City	6,250
6.	Big Bend	6,700	3.	Lee Canyon #1	8,300	9.(Cal.)	Rubicon #2	7,500
7.	Fry Canyon	6,700	4.	Lee Canyon #2	9,000	10.(Cal.)	Rubicon #3	6,700
8.	Rodeo Flat	6,800	5.	Rainbow Canyon #2. . . .	8,100	11.(Cal.)	Richardsons #2	6,500
9.	Lower Jack Creek.	6,800	6.	Mica Notch	6,000	12.(Cal.)	Echo Summit.	7,500
10.	Upper Jack Creek	7,250	7.	Dud Springs	6,000	13.	Marlette Lake.	8,000
11.	Tremewan Ranch	5,700	8.	Mathew Canyon	6,000	14.	Daggetts Pass.	7,350
12.	Taylor Canyon	6,200	9.	Pine Canyon	6,200	15.	Glenbrook #2	6,900
13.	Lower Trout Creek. . . .	6,900	EASTERN NEVADA			16.	Mt. Rose	9,000
14.	Upper Trout Creek. . . .	8,500	1.	Cave Creek	7,000	CENTRAL GREAT BASIN		
15.	Dorsey Basin	8,100	2.	Eager Canyon	8,500	1.	Clark Canyon.	9,000
16.	Ryan Ranch	5,800	3.	Murray Summit.	7,250	2.	Trough Springs.	8,500
17.	Dry Creek	6,500	4.	Baker #1	7,950	3.(Cal.)	McAfee Forks.	7,500
18.	Lamoille #1	7,100	5.	Baker #2	8,950	4.(Cal.)	Roberts Ranch	8,300
19.	Lamoille #2	7,300	6.	Baker #3	9,250	5.(Cal.)	Goat Springs.	10,300
20.	Lamoille #3	7,700	7.	Berry Creek.	9,100	6.(Cal.)	Sage Hen Flats.	10,500
21.	Lamoille #4	8,000	8.	Bird Creek	7,500	7.(Cal.)	Ranger Station.	9,500
22.	Lamoille #5	8,700	LOWER HUMBOLDT RIVER			8.(Cal.)	White Mountain. . . .	13,000
23.	Green Mountain	8,000	1.	Lower Buckskin	6,700			
24.	Harrison Pass #1	6,600	2.	Upper Buckskin	7,200			
25.	Harrison Pass #2	7,400	3.	Martin Creek	6,700			
26.	Corral Canyon.	8,500	4.	Granite Peak	7,800			
			5.	Lamance Creek	6,600			
			6.	Midas	7,200			
			7.	Big Creek Camp Ground. .	6,000			
			8.	Big Creek Mine	7,000			
			9.	Upper Big Creek.	8,000			
			10.	Lower Corral	7,500			
			11.	Upper Corral	8,500			

WATER SUPPLY OUTLOOK

NEVADA

APRIL 1, 1949

* * * * *
* Irrigation season water supplies will *
* range from fair in Western to excell- *
* ent in Eastern Nevada. Snow water *
* runoff of Eastern Sierra streams will *
* vary from 70 to 95 percent of normal *
* while Humboldt Basin streams will flow *
* from 100 to 200 percent of normal. *
* * * * *

Snow stored water in the Sierra is quite heavy at the lower elevations being about twice normal while the higher elevation snow is about normal. Low snow in Humboldt Basin is about twice normal while high snow is about 135 percent.

In general precipitation throughout the State is about normal or slightly below. Heavy snow cover at this date is due to extremely low temperatures during the winter.

Groundwater levels are down in the major irrigated valleys. This shortage will be replenished by surface runoff with a resultant decrease in available surface water.

Early season streamflow has been retarded by sub-normal temperatures.

Reservoir storage is poor with total storage on April 1 about 80 percent of last year, 45 percent of the 1938-47 average, and 35 percent of the usable capacity. Lake Mead contains about 95 percent of last years storage on this date.

STREAMFLOW FORECASTS APRIL 1, 1949

Forecast Stream	April-July, inclusive streamflow Thousands Acre Feet							
	Forecast 1949	1938-47 Average	1949 as % 10 yr. Avg.	1901-45 Normal	1949 as % 45yr. Norm.	1948	1947	1946
Owyhee River, nr. Owyhee, Nev. ¹	150	82	183	80	187	54	32	88
Lamoille Crk. nr. Lamoille, Nev.	32	29	110	30	107	25	25	30
So. Fk. Humboldt nr. Elko, Nev.	160	87	184	70	218	45	44	90
Humboldt River at Palisade, Nev.	300	247	121	200	150	104	94	256
Martin Crk. nr. Paradise, Nev.	14	16	87	20	70	13	7	14
West Carson at Woodfords, Calif.	50	63	79	65	77	45	35	55
East Carson nr. Gardnerville, Nev.	180	213	85	210	86	151	121	178
Carson River nr. Carson City, Nev.	160	206	78	200	80	132	93	172
Carson River at Ft. Churchill, Nev.	135	191	71	195	69	113	80	154
West Walker nr. Coleville, Calif.	165	163	101	175	94	109	104	149
East Walker nr. Bridgeport, Calif. ²	65	77	84	75	87	32	31	56
Truckee River at Frad, Calif. ³	250	272	92	290	86	211	127	268
Lake Tahoe ⁴	359	692	52	583	62	465	611	737

1. Corrected for storage in Wildhorse Reservoir.
2. For period April through August corrected for storage in Bridgeport Reservoir.
3. Exclusive of Tahoe and corrected for storage in Donner, Independence, and Boca Reservoirs.
4. Maximum storage with gates closed.

Tahoe and Truckee Forecasts by Truckee Basin Water Committee.

STREAMFLOW FORECASTS APRIL 1, 1949

Snake River Basin in Nevada

Snow stored water on the headwaters of Salmon Falls and Bruneau River is about 150 percent of last year on this date and 150 percent of average.

Flow of Owyhee River near Owyhee, Nevada, for the period April through July is forecast at 150,000 acre feet. This is three times the flow last year or 187 percent of the 45 year normal. Wildhorse Reservoir contained 6,000 acre feet on April 1, or 20 percent of capacity. The reservoir will probably fill this season.

Upper Humboldt Basin

Snow stored water on the headwaters of Marys River, North Fork, and Susie, and Maggie Creeks is about twice normal at the low elevations and about 40 percent above at the high elevations. Snow is wind packed indicating gradual melting with late runoff.

From Trout Creek to Lamoille Creek snow stored water at the low elevations is about 200 percent of normal while there is about 115 percent at high elevations.

The April-July flow of Lamoille Creek near Lamoille is forecast at 32,000 acre feet. This is 30 percent better than last year and 10 percent above normal. South Fork of Humboldt near Elko is forecast to flow 160,000 acre feet. This is three times that available last year and twice normal.

The forecast flow of Humboldt River at Palisade for the period April-July is 300,000 acre feet or three times last year and 150 percent of normal. Cumulative discharge since October 1, is 70 percent of the median.

Lower Humboldt Basin

Snow stored water on the headwaters of Little Humboldt Basin is twice normal at low elevations and about normal at high elevations. The April-July forecast flow of Martin Creek near Paradise Valley is 14,000 acre feet. This is approximately the same as was available last year and is 70 percent of normal.

Snow stored water on the headwaters of Reese River is slightly better than last year and about 150 percent of normal.

Snow cover on Rock Creek is three times greater than normal with snow conditions similar to those in 1945.

Pitt-Taylor and Rye Patch Reservoirs contained 65,000 acre feet on April 1. This is approximately 50 percent of the storage on this date last year and 30 percent of capacity. Above average runoff from Upper Humboldt maybe sufficient to fill the reservoirs.

Northern Great Basin

Snow stored water contributing to Quinn River and McDermitt Creek is greater than normal and will cause these streams to flow about 25 percent above normal.

Eastern Nevada

Snow stored water above Steptoe and Ruby Valleys is much greater than normal. Snow surveys by the Fish and Wildlife Service at the south end of Ruby Valley indicate a snow cover twice normal.

Section 101

The first of the two main parts of the report is a description of the work done during the year. This is followed by a summary of the results of the work. The second part of the report is a discussion of the work done during the year. This is followed by a summary of the results of the work.

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The Snake Range contains 130 percent of last years snow and 120 percent of normal.

Snow water above the City of Ely is still heavy with the amount measured April 1 about twice normal or similar to that available in 1945.

Central Great Basin

Snow on the White Mountains above Fish Lake Valley in West Central Nevada is better than average. A new snow course near White Mountain Peak at 12,000 feet elevation established and surveyed in cooperation with the U.S. Navy and Deep Springs School measured 36 inches of snow and 15 inches of water.

Lower Colorado River in Nevada

Snow cover in the Mount Charleston area near Las Vegas is about 80 percent better than last year and 60 percent greater than the past 8 year average.

The heavy snow pack on Meadow Valley Wash is practically gone. Danger of high water from snow melt no longer exits.

Lake Mead contains about 1,000,000 acre feet less water than last year at this time.

Walker Basin

West Walker River near Coleville is forecast to flow 165,000 acre feet from April through July. This is 150 percent of last year and 95 percent of the 45 year normal. Cumulative discharge since October 1 is 50 percent of median. Topaz Reservoir contained 22,000 acre feet in storage on April 1. This is less than last year and only 40 percent of capacity. The Reservoir will probably fill this year.

White Mountain

Snow on the White Mountain above Fish Lake Valley in East Central Nevada is better than average. A new snow course near White Mountain Peak at 12,000 feet elevation established and surveyed in cooperation with the U.S. Army and Deep Springs School measured 36 inches of snow and 1 1/2 inches of water.

Lower Colorado River in Nevada

Snow cover in the Mount Charleston area near Las Vegas is about 40 percent better than last year and 60 percent greater than the past 5 year average.

The heavy snow pack on Meadow Valley Peak is practically gone. Barrier of high water from snow melt no longer exists.

Lake Mead contains about 1,000,000 acre feet less water than last year at this time.

Walker River

Great Walker River near Lovell is forecast to flow 11,000 acre feet from April through July. This is 150 percent of last year and 75 percent of the 15 year normal. Cumulative discharge since October 1 is 25 percent of normal. Lower Reservoir contained 37,000 acre feet in storage on April 1. This is less than last year and only 60 percent of capacity. The Reservoir will probably fill this year.

April through August flow of East Walker River near Bridgeport is forecast at 65,000 acre feet. This is twice the flow of last year and almost 90 percent of normal. Bridgeport Reservoir stored 20,000 acre feet on April 1, which is slightly less than last year and about 50 percent of capacity. The reservoir will probably fill this year.

Carson Basin

East Carson River near Gardnerville is forecast to flow 180,000 acre feet, which is more than was available last year and 86 percent of the long time normal. Stream discharge will probably remain above 200 second feet until the last week in July.

April through July flow of West Carson at Woodfords is forecast at 50,000 acre feet. This is slightly more than the runoff of last year and almost 80 percent of normal.

Water supplies from local drainages in Upper Carson Valley which are dependent upon low elevation snow should be better than any year since 1941.

Flow at Fort Churchill is forecast at 135,000 acre feet or 69 percent of the 45 year normal and about 20 percent greater than last year.

Lahontan Reservoir contained 197,000 acre feet on April 1 of this year compared to 189,000 last year and 248,000 for the 1938-47 average for this date. This years storage is almost 70 percent of capacity.

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Tahoe Basin

April 1 storage in Lake Tahoe was 183,000 acre-feet. This is 68 percent of the stored water last year and only 36 percent of the past ten year average for this date. Truckee Basin Water Committee forecasts a maximum storage, assuming gates closed, of 359,000 acre feet. This is 77 percent of last year and 62 percent of the 45 year normal. When storage drops below 200,000 acre feet it becomes difficult to release sufficient water from the Lake to satisfy decreed rates of flow in Truckee River.

Truckee Basin

Truckee Basin Water Committee forecasts the April-July flow of Truckee River at Farad, to be 250,000 acre feet. This is 118 percent of last year and 86 percent of the 45 year normal.

STATUS OF RESERVOIR STORAGE, APRIL 1, 1949

BASIN and STREAM RESERVOIR		USABLE CAPACITY (THOUS. A.F.)	THOUSANDS	ACRE	FEET	IN STORAGE	ABOUT APR.1 10-yr. avg. 1938-1947
			1949	1948	1947	1946	
Owyhee	Wildhorse	33	6	6	19	24	15 ^a
Lower Humboldt	Pitt Taylor	27	0	0	23	19	22 ^b
Lower Humboldt	Rye Patch	178	65	120	186	187	180 ^c
Tahoe	Tahoe	750	183	268	534	589	509
Carson	Lahontan	286	197	189	246	250	245
West Walker	Topaz	59	22	25	52	55	48
East Walker	Bridgeport	42	20	24	44	43	39
Colorado	Mead	27,935	17,735	18,620	16,383	17,776	19,229 ^d

a - Average for years 1940 - 1947

b - Average for years 1938 - 1941, 1945 - 1947

c - Average for years 1943 - 1947

d - Average for years 1939 - 1947

NEVADA SNOW SURVEYS APRIL 1, 1949

DRAINAGE BASIN and SNOW COURSE	LOCATION		SNOW COVER MEASUREMENTS						
			Water Content (inches)			Past Record		Av. Water Content (inches)	
			1949	1948	1947	Years of Record			
	Number	Sec. Twp. Rge. Elev.	Date of Survey	Snow Depth (inches)					
SNAKE RIVER									
Bear Creek	1	31 46N 58E 7800	3/30	77.2	24.4	20.0	15.0	6	19.2
Fox Creek	2	33 46N 58E 6800	3/29	41.5	13.9	7.6	2.8	12	8.0
76 Creek	4	6 44N 58E 7100	No	Survey		11.3	6.7	3	11.1
Gold Creek	5	31 45N 56E 6600	3/28	28.9	9.5	5.8	0	9	5.8
Big Bend	6	30 45N 56E 6700	3/28	42.4	15.2	8.3	3.6	21	9.1
OWYHEE RIVER									
Lower Buckskin	1	25 45N 39E 6700	4/3	39.5	14.2	10.2	0	8	7.5
Upper Buckskin	2	11 45N 39E 7200	4/4	29.6	9.1	10.4	1.4	13	11.1
Martin Creek	3	18 44N 40E 6700	4/2	26.3	8.6	9.7	1.1	8	8.3
Granite Peak	4	22 44N 39E 7800	4/2	31.4	8.9	9.7	7.2	9	11.8
Gold Creek	5	31 45N 56E 6600	3/28	28.9	9.5	5.8	0	9	5.8
Big Bend	6	30 45N 56E 6700	3/28	42.4	15.2	8.3	3.6	21	9.1
Fry Canyon	7	31 43N 54E 6700	3/29	44.5	15.0	7.9	4.4	8	8.5
Rodeo Flat	8	36 43N 53E 6800	3/29	47.0	16.2	9.1	4.2	8	9.3
Lower Jack Creek	9	18 42N 53E 6800	3/31	15.4	4.5	4.7	0	14	4.3
Upper Jack Creek	10	9 42N 53E 7250	3/31	43.0	14.3	11.6	4.2	8	10.1
Tremewan Ranch	11	9 39N 55E 5700	3/30	13.1	4.6	0	0	7	0.1
Taylor Canyon	12	35 39N 53E 6200	3/30	29.4	8.9	0.5	0	8	3.3

NEVADA SNOW SURVEYS APRIL 1, 1949

LOCATION		SNOW COVER MEASUREMENTS										
		Number	Sec..Twp.. Rge.. Elev.	Date of Survey	Snow Depth (inches)	Water Content(inches)		Past Record				
						1949	1948	1947	Years of Record	Av. Water Content (inches)		
DRAINAGE BASIN and SNOW COURSE												
UPPER HUMBOLDT												
Bear Creek	1	31	46N	58E	7800	3/30	77.2	24.4	20.0	15.0	6	19.2
Fox Creek	2	33	46N	58E	6800	3/29	41.5	13.9	7.6	2.8	12	8.0
76 Creek	4	6	44N	58E	7100	No	Survey	.	11.3	6.7	3	11.1
Gold Creek	5	31	45N	56E	6600	3/28	28.9	9.5	5.8	0	9	5.8
Big Bend	6	30	45N	56E	6700	3/28	42.4	15.2	8.3	3.6	21	9.1
Fry Canyon	7	31	43N	54E	6700	3/29	44.5	15.0	7.9	4.4	8	8.5
Rodeo Flat	8	36	43N	53E	6800	3/29	46.9	16.2	9.1	4.2	8	9.3
Lower Jack Creek	9	18	42N	53E	6800	3/31	15.4	4.5	4.7	0	14	4.3
Upper Jack Creek	10	9	42N	53E	7250	3/31	43.0	14.3	11.6	4.2	8	10.1
Tremewan Ranch	11	9	39N	55E	5700	3/30	13.1	4.6	0	0	7	0.1
Taylor Canyon	12	35	39N	53E	6200	3/30	29.4	8.9	0.5	0	8	3.3
Lower Trout Creek	13	28	37N	61E	6900	3/31	22.3	7.0	No Survey	0	3	1.9
Upper Trout Creek	14	4	36N	61E	8500	3/31	77.2	28.8	"	21.5	3	30.2
Dorsey Basin	15	28	35N	60E	8100	4/2	54.4	18.4	11.9	6.4	7	16.1
Ryan Ranch	16	1	34N	59E	5800	3/31	4.1	2.0	0	0	7	0.6
Dry Creek	17	5	34N	60E	6500	4/1	19.6	8.0	1.8	0	7	3.9
Lamoille #1	18	15	32N	58E	7100	3/29	42.3	12.4	11.2	4.0	17	9.9
Lamoille #2	19	14	32N	58E	7300	3/29	41.6	13.0	12.1	2.9	20	10.4
Lamoille #3	20	24	32N	58E	7700	3/29	53.2	18.2	15.2	7.0	14	13.8
Lamoille #4	21	19	32N	59E	8000	3/28	72.5	24.0	20.7	13.5	8	19.1
Lamoille #5	22	31	32N	59E	8700	3/29	88.2	29.4	24.4	23.6	11	26.8
Green Mountain	23	23	29N	57E	8000	No	Survey		14.1	4.4	7	14.0
Harrison Pass #1	24	9	28N	57E	6600	3/31	23.0	9.0	5.5	0	12	5.2
Harrison Pass #2	25	16	28N	57E	7400	3/31	30.6	11.0	7.1	0	7	4.8
Corral Canyon	26	27	28N	57E	8500	No	Survey		17.5	14.8	7	19.5

NEVADA SNOW SURVEYS, APRIL 1, 1949

LOCATION	SNOW COVER MEASUREMENTS									
	Number	Sec.	Twp.	Rge.	Elev.	Date of Survey	Snow Depth (inches)	Water Content (inches)		Past Record Years of Record
								Same	Approx. date	
								1949	1948	1947
										Content (inches)
DRAINAGE BASIN and SNOW COURSE										
LOWER HUMBOLDT										
Lower Buckskin	1	25	45N	39E	6700	4/3	39.5	14.2	10.2	0
Upper Buckskin	2	11	45N	39E	7200	4/4	29.6	9.1	10.4	1.4
Martin Creek	3	18	44N	40E	6700	4/2	26.3	8.6	9.7	1.1
Granite Peak	4	22	44N	39E	7800	4/2	31.4	8.9	9.7	7.2
Lamance Creek	5	13	42N	38E	6600	4/1	33.1	11.9	5.3	0
Midas	6	18	39N	46E	7200	4/1	25.2	8.0	1.4	0
Big Creek Camp Ground	7	10	17N	43E	6000	4/3	11.7	5.4	3.5	0
Big Creek Mine	8	23	17N	43E	7000	4/3	23.5	9.5	5.1	0
Upper Big Creek	9	26	17N	43E	8000	4/3	24.3	10.3	10.5	6.2
Lower Corral	10	12	11N	40E	7500	4/2	4.4	2.5	3.9	0
Upper Corral	11	20	11N	41E	8500	4/2	19.4	7.9	8.7	0
EASTERN NEVADA										
Cave Creek	1	25	27N	57E	7000	3/31	52.1	24.2	14.5	6.8
Hager Canyon	2	34	27N	57E	8500	3/31	66.8	25.7	18.0	11.9
Murray Summit	3	25	18N	62E	7250	3/31	19.2	5.8	4.2	0
Baker #1	4	29	13N	69E	7950	4/5	32.8	11.6	8.9	2.1
Baker #2	5	30	13N	69E	8950	4/5	60.5	20.0	14.4	19.8
Baker #3	6	25	13N	68E	9250	4/5	63.1	20.5	17.0	22.4
Berry Creek	7	26	17N	65E	9100	3/30	57.4	18.9	14.2	New
Bird Creek	8	34	19N	65E	7500	3/29	22.9	7.3	6.8	New
										Course
										Course

NEVADA SNOW SURVEYS APRIL 1, 1949

LOCATION	SNOW COVER MEASUREMENTS									
	Number	Sec. Twp. Rge. Elev.	Date of Survey	Snow Depth (inches)	Water Content (inches)			Past Record		
					1949	1948	1947	Years of Record	Av. Water Content (inches)	
DRAINAGE BASIN and SNOW COURSE										
LOWER COLORADO										
Rainbow Canyon	1	31 19S	3/29	46.1	17.1	12.6	6.4	8	12.7	
Kyle Canyon	2	26 19S	3/29	45.9	16.8	10.5	2.8	7	11.2	
Lee Canyon #1	3	10 19S	3/31	64.0	18.7	9.4	4.8	8	10.0	
Lee Canyon #2	4	9 19S	4/1	70.2	20.3	8.0	5.2	7	11.7	
Rainbow Canyon #2	5	6 20S	3/29	55.0	20.6	14.8	12.3	2	13.6	
Mathew Canyon	8	11 5S	4/2	2.4	0.9	New	Snow	Course		
Pine Canyon	9	11 6S	4/3	5.7	2.3	"	"	"		
CENTRAL GREAT BASIN										
Clark Canyon	1	8 19S	4/1	61.6	18.0	8.1	5.2	4	9.0	
Trough Springs	2	23 18S	4/3	51.8	14.3	7.2	1.6	3	5.2	
McAfee Forks (Cal.)	3	1 4S	4/2	12.0	5.6	0	New Course			
Roberts Ranch (Cal.)	4	11 6S	3/30	3.5	1.0	0	No Survey	2	1.1	
Goat Spring (Cal.)	5	13 6S	3/30	26.0	8.6	0	"	2	2.7	
Sage Hen Flats (Cal.)	6	29 5S	3/29	30.4	9.5	1.8	"	2	3.7	
Ranger Station (Cal.)	7	14 5S	3/28	24.9	7.6	0.9	"	2	1.7	
White Mountain (Cal.)	8	9 4S	3/29	35.7	15.0	New	Snow Course			
NORTHERN GREAT BASIN										
Bald Mountain	1	17 45N	3/31	27.5	9.1	2.2	0	9	2.3	
Disaster Peak	2	18 47N	4/2	39.4	14.4	New	Snow Course			

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The *Agrobacterium* strains were incubated with the plant explants for 24 h. The explants were then cultured on the selective medium. The number of explants transformed was counted. The results are the mean \pm SD of three independent experiments. The scale of the y-axis is the number of explants transformed per 100 explants.

NEVADA SNOW SURVEYS APRIL 1, 1949

LOCATION		SNOW COVER MEASUREMENTS						
		Water Content(inches)			Past Record			
		Same Approx.date	1947	1948	1949	Years of Record	Av. Water Content (inches)	
DRAINAGE BASIN and SNOW COURSE	Number	Sec. Twp. Rge. Elev.	Date of Survey	Snow Depth (inches)				
TAHOE								
Lake Lucille (Cal)	1	28 12N 17E	4/2	149.3	57.9	43.8	49.3	35 56.2
Rubicon #1 (Cal.)	2	6 13N 17E	4/3	122.7	45.2	26.1	41.8	33 45.4
Hagans Meadow (Cal.)	3	36 12N 18E	4/3	57.1	22.4	10.1	13.6	31 16.5
Freel Bench (Cal.)	4	36 12N 18E	4/3	40.7	16.2	6.7	4.6	19 9.9
Ward Creek (Cal.)	5	21 15N 16E	4/2	115.4	48.2	30.6	37.8	36 43.9
Upper Truckee (Cal.)	7	21 12N 18E	4/3	34.1	13.7	2.8	0.6	19 6.4
Tahoe City (Cal.)	8	6 15N 17E	4/2	46.1	22.5	5.5	0.0	38 12.9
Rubicon #2 (Cal.)	9	6 13N 17E	4/3	77.6	30.8	18.1	25.9	30 28.6
Rubicon #3 (Cal.)	10	32 14N 17E	4/3	67.6	25.5	12.4	13.1	9 20.0
Richardsons #2 (Cal.)	11	6 12N 18E	4/4	55.5	22.8	9.8	7.2	5 13.5
Echo Summit (Cal.)	12	6 11N 18E	4/1	99.5	37.2	27.2	30.1	9 38.5
Marlette Lake	13	13 15N 18E	4/5	55.4	19.0	12.6	20.5	32 23.1
Daggetts Pass	14	19 13N 19E	4/3	41.4	16.2	6.7	7.6	33 13.1
Glenbrook #2	15	13 14N 18E	4/4	38.2	14.2	8.0	10.0	7 14.2
Mt. Rose	16	7 17N 19E	4/1	78.2	27.9	13.5	28.9	39 31.1
TRUCKEE								
Granite Peak (Cal.)	1	24 19N 17E	No Survey	No Survey	No Survey	No Survey	17.2	24 19.0
Independence Lake (Cal.)	2	9 18N 15E	4/3	96.6	36.6	24.8	31.7	12 41.0
Webber Peak (Cal.)	3	30 19N 14E	4/2	117.0	43.0	30.0	30.0	27 40.1
Donner Summit (Cal.)	4	25 17N 14E	3/28	101.7	42.0	24.8	24.8	38 38.6
Ward Creek (Cal.)	5	21- 15N 16E	4/2	115.4	48.2	30.9	30.9	36 43.9
Webber Lake (Cal.)	6	20 19N 14E	4/2	90.0	35.0	19.5	19.5	24 29.2

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NEVADA SNOW SURVEYS APRIL 1, 1949

LOCATION		SNOW COVER MEASUREMENTS											
		Water Content (inches)							Past Record				
		Number	Sec.	Twp.	Rge.	Elev.	Date of Survey	Snow Depth (inches)	Same Approx. date		Years of Record	Av. Water Content (inches)	
1949	1948								1947				
DRAINAGE BASIN and SNOW COURSE													
TRUCKEE (Con't.)													
Sage Hen Creek (Cal.)	7	7	18N	16E	6500	4/2	52.6	20.6	6.4	9.7	12	17.6	
Tahoe City (Cal.)	8	6	15N	17E	6250	4/2	46.1	22.5	5.5	0	38	12.6	
Truckee #2 (Cal.)	9	22	17N	16E	6400	4/2	49.6	18.9	7.4	6.8	19	14.3	
Independence Creek (Cal.)	10	14	19N	15E	6300	4/4	42.6	15.6	4.2	4.4	12	12.7	
Boca #2 (Cal.)	11	28	18N	17E	5900	No	Survey		No	Survey	15	5.0	
Furnace Flat (Cal.)	12	10	17N	13E	6600	4/4	113.7	48.5	28.7	28.6	30	43.7	
Fordyce Lake (Cal.)	13	34	18N	13E	6500	4/5	110.4	49.6	23.0	20.7	31	37.5	
Soda Springs (Cal.)	14	23	17N	14E	6750	3/23	87.6	36.3	19.5	23.1	20	34.3	
Independence Camp (Cal.)	15	34	19N	15E	7000	4/2	62.5	25.0	12.1	12.7	8	20.6	
Mt. Rose	16	7	17N	19E	9000	4/1	78.2	27.9	13.5	28.9	39	31.1	
Truckee Ranger Sta. (Cal.)	17	10	17N	16E	6000	3/31	43.7	16.2	6.5	0	4	7.5	
Donner Lake (Cal.)	18	14	17N	15E	5950	4/2	72.3	30.0	12.0	8.8	5	18.8	
Big Meadows	19	15	18N	18E	8800	4/4	46.3	18.7	16.7	16.4	26	23.3	
Little Valley	20	17	16N	19E	6300	3/31	42.6	21.7	2.6	0.3	7	8.2	
CARSON													
Carson Pass (Cal.)	1	22	10N	18E	8600	3/26	95.3	35.4	33.4	30.5	19	36.7	
Poison Flat (Cal.)	2	25	8N	21E	7900	4/6	54.2	20.9	8.3	9.4	7	13.7	
Blue Lakes (Cal.)	3	30	9N	19E	8000	3/26	100.1	36.3	25.0	30.1	30	35.2	
Clear Creek	4	16	14N	19E	7300	4/3	40.2	16.3	New	Snow Course			

NEVADA SNOW SURVEYS APRIL 1, 1949

LOCATION		SNOW COVER MEASUREMENTS										
		Number	Sec.	Twp.	Rge.	Elev.	Date of Survey	Snow Depth (inches)	Water Content (inches)		Past Record	
									Same Approx. date	1947	Years of Record	Av. Water Content (inches)
DRAINAGE BASIN and SNOW COURSE												
WALKER												
Center Mountain (Cal.)	1	4	3N	23E	9400	4/1	108.6	39.9	22.8	30.9	26	34.3
Sonora Pass (Cal.)	2	1	5N	21E	8800	4/5	68.1	27.0	14.1	17.9	17	24.2
Buckeye Forks (Cal.)	3	20	4N	23E	8500	3/31	66.7	22.7	12.1	16.1	18	19.4
Virginia Lakes (Cal.)	4	5	2N	25E	9500	3/25	53.8	18.5	10.4	15.9	2	13.2
Willow Flat (Cal.)	5	21	5N	23E	8250	3/29	38.5	12.2	5.5	7.9	15	10.9
Buckeye Roughs (Cal.)	6	15	4N	23E	7900	3/31	71.4	25.0	8.1	15.0	26	20.7
Leavitt Meadows (Cal.)	7	4	5N	22E	7200	4/5	32.5	11.9	3.1	1.4	19	7.7
Tioga Pass (Cal.)	8	30	1N	25E	9900	4/1	47.6	14.9	15.7	19.4	19	25.7

(The following information was obtained from the records of the Department of Health, Education and Welfare, Washington, D.C., Office of the Assistant Secretary for Health Policy and Statistics.)

Journal of Management Studies, 19(1), 67-80.

1. *Pharmaceutical industry*—United States—History. I. Title. II. Series.

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SNOW SURVEYORS

April 1949

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A. Barnhill	G. Martin
B. Bell	W. Mason
M. Benson	C. Matson
W. Birdsall	E. McKinnon
M. Bishop	A. Murchie
T. Blohm	B. Murphy
T. Brierley	E. Murphy, Jr.
A. Chase	E. Naanes
J. Church	G. Neuharth
P. Cowgill	M. Neuharth
E. Dillwith	E. Ford
W. Dillwith	P. Ogden
G. Doll	R. Patch
J. Dove	B. Peterson
J. Ferguson	J. Pescio
M. Follstad	W. Price
R. Gardner	E. Raiford
C. Gnevo	F. Richardson
D. Goodale	R. Ross
B. Halliday	C. Salls
E. Hance	L. Sawyer
H. Hansen	D. Schmidtlein
E. Hanson	J. Silva
R. Harrington	G. Slovik
J. Hart	B. Smith
V. Hart	L. Smith
R. Hauk	M. Steninger
J. Hess	G. Swainston
C. Houston	A. Swindlehurst
J. Hunnicutt	A. Te Selle
D. Jewett	G. Warren
K. Jones	J. Watts
C. Karplus	L. Wilkerson
J. Kingsley	J. Wilkerson
R. Kuehner	F. Woods
A. Lamson	L. Woods
R. Law	A. Wright

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